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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,710	10/09/2001	Peggy-Jean P. Flanigan	55526US002	7863
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3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			EXAMINER SIMONE, CATHERINE A	
			ART UNIT 1794	PAPER NUMBER
			NOTIFICATION DATE 09/01/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 09/974,710	<b>Applicant(s)</b> FLANIGAN ET AL.
	<b>Examiner</b> CATHERINE SIMONE	<b>Art Unit</b> 1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

#### Status

- 1) Responsive to communication(s) filed on 23 April 2009.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-7,12,14-16,19-22,26,28-53,55 and 57-60 is/are pending in the application.
- 4a) Of the above claim(s) 36-53 and 55 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3-7,12,14-16,19-22,26,28-35 and 57-60 is/are rejected.
- 7) Claim(s) 16 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 2/25/2009
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Withdrawn Rejections***

1. The 35 U.S.C. 112, first paragraph, rejection of claims 1, 11, 13, 16 and 17 of record in the previous Office Action mailed 1/27/2009 on pages 2-3 has been withdrawn due to the Applicant's amendment filed on 4/23/2009.
2. The 35 U.S.C. 102(b) rejection of claims 1, 3, 4, 6, 7, 11, 13, 16, 17, 19, 20 and 21 as anticipated by Mann of record in the previous Office Action mailed 1/27/2009 on pages 3-5 has been withdrawn due to the Applicant's amendment filed on 4/23/2009.
3. The 35 U.S.C. 103(a) rejection of claims 5, 10, 12, 14, 15, 22, 26 and 56-60 as unpatentable over Mann of record in the previous Office Action mailed 1/27/2009 on page 6 has been withdrawn due to the Applicant's amendment filed on 4/23/2009.

***Claim Objections***

4. Claim 16 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. Claim 16 has now been amended to depend from claim 12 instead of claim 13. Claim 16 fails to further limit the subject matter of claim 12 due to the fact that the limitation recited in claim 16 is the same limitation recited in claim 14, which also depends from claim 12. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3, 4, 5, 7, 12, 14, 15, 16, 19, 22, 26 and 57-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hata (JP 11-181367).

Regarding claims 1 and 22, Hata discloses an article (window glass structure) comprising at least one adhesive layer (*Drawings 1, 3 and 4, layer 10*) with a first major surface and a second major surface (*Drawings 1, 3 and 4*), wherein at least one of the first and second major surfaces is a structured surface (*Drawings 1, 3 and 4, surface 2*), and a backing (*Drawings 3 and 4, backing 31*) directly adjacent to the structured surface of the at least one adhesive layer, wherein both surfaces of the backing are non-structured (*Drawings 3 and 4, backing 31*). The article comprises discrete, encapsulated reservoirs (*Drawings 1, 3 and 4, reservoirs 3*) between the structured surface of the at least one adhesive layer and the backing. The article has a non-structured exposed adhesive surface that can be adhered to a target substrate (*Drawing 3*).

Hata fails to disclose each reservoir having a void volume of less than 20 nL and the article having a peel strength of at least 21-42 oz/0.5 inch for a thickness of 0.003 to 0.007 inches.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the article in Hata to have a peel strength of at least 21-42 oz/0.5 inch for a thickness of 0.003 to 0.007 inches and to have modified the reservoirs of the article in

Hata to each have a void volume of less than 20 nL, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II).*

Regarding claims 3 and 4, Hata discloses that the adhesive layer is a pressure sensitive adhesive selected from the group consisting of acrylics, natural and synthetic rubbers, ethylene vinyl acetate, vinyl ethers, silicones, poly(alpha olefins), and combinations thereof (*paragraphs 0023 and 0031-0033*).

Regarding claim 7, Hata discloses at least one non-adhesive layer in contact with one of the first and second major surfaces (*Drawing 4, layer 32 and paragraph 0023*).

Regarding claims 5 and 57, Hata fails to disclose the thickness of the article being of about 2  $\mu\text{m}$  to about 500  $\mu\text{m}$  and each of the reservoirs having a void volume less than 4 nL. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the thickness of the article or the volume of the reservoirs in Hata to have the claimed ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II).*

Regarding claims 12, 14, 15, 16 and 58-60, Hata discloses reservoirs that contain at least one deliverable or non-deliverable vibration-damping fluid substance (*air, paragraph 0021*).

Regarding claim 26, Hata discloses a backing adjacent the second major surface (*Drawing 4, backing 32*).

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7. Claims 6, 20, 21 and 28-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hata (JP 11-181367) in view of Hata (WO 97/33946).

Hata (JP 11-181367) teaches the claimed article as described above.

Hata (JP 11-181367) fails to teach a second adhesive layer having a first major surface and a second major surface wherein at least one of the first and second major surfaces is a structured surface, wherein the at least one adhesive layer and the second adhesive layer are in contact; and the first major surface of the first adhesive layer being a structured surface and the second major surface of the first adhesive layer being a non-structured adhesive surface, and the first major surface of the second adhesive layer being a structured surface and the second major surface of the second adhesive layer being a non-structured surface, and the second major surface of the first adhesive layer contacting the first major surface of the second adhesive layer.

Hata (WO 97/33946) teaches an adhesive sheet having first and second adhesive layers (Fig. 3a), wherein the second adhesive layer has a first major surface and a second major surface and at least one of the first and second major surfaces is a structured surface, and the first adhesive layer and the second adhesive layer are in contact, and the first major surface of the first adhesive layer is a structured surface and the second major surface of the first adhesive layer is a non-structured adhesive surface, and the first major surface of the second adhesive layer is a structured surface and the second major surface of the second adhesive layer is a non-structured surface, and the second major surface of the first adhesive layer contacts the first major surface of the second adhesive layer for the purpose of providing a multi-layered adhesive sheet that can absorb, subside or release an external action such as impact, vibration (including sound), heat etc. (page 3, lines 6-7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the structure in Hata (JP 11-181367) with a two-layered adhesive sheet instead of one layer of adhesive wherein the second adhesive layer has a first major surface and a second major surface and at least one of the first and second major surfaces is a structured surface, and have the first adhesive layer and the second adhesive layer be in contact, and the first major surface of the first adhesive layer being a structured surface and the second major surface of the first adhesive layer being a non-structured adhesive surface, and the first major surface of the second adhesive layer being a structured surface and the second major surface of the second adhesive layer being a non-structured surface, and have the second major surface of the first adhesive layer contacting the first major surface of the second adhesive layer as suggested by Hata (WO 97/33946) in order to form a multi-layer adhesive structure providing improved heat-insulating, soundproofing, and vibrationproofing effects.

***Response to Arguments***

8. Applicant's arguments filed 4/23/2009 with regard to the 102 and 103 rejections using the Mann reference have been considered, but are moot, since the rejections have been hereby withdrawn.
9. Applicant's arguments filed 4/23/2009 with regard to the 102 and 103 rejections using the Hata reference have been fully considered but they are not persuasive.

Applicants argue that "There is no teaching, suggestion, disclosure or enablement in Hata that the articles formed with the protrusions of Hata would have such void volumes...Hata

teaches away from smaller volumes by stating that smaller volumes would not permit the article to function in the way designed".

This is not deemed persuasive. It is to be pointed out that Hata teaches the reservoirs to each have a volume *preferably* in the range of 1-600 mm<sup>3</sup>. (see page 7 of Description, paragraph 0022). Therefore, the volume of each reservoir in Hata does not necessarily have to be in the range of 1-600 mm<sup>3</sup>, it is just *preferred* that each reservoir in Hata have a volume in the range of 1-600 mm<sup>3</sup>. Thus, the volume of each reservoir in Hata could be smaller than 1 mm<sup>3</sup>, such as less than 20 nL. Accordingly, Hata does not teach away from smaller volumes for the reservoirs. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). Furthermore, Applicants have not provided any evidence of the criticality of the claimed range for the volume of the reservoirs. Absent a teaching of the criticality or showing of unexpected results from the volume of each of the reservoirs being within the claimed range, it would not provide a patentable distinction over the prior art. See MPEP 2144.05 (II). As a result, claims 1, 3-7, 12, 14-16, 19-22, 26, 28-35 and 57-60 are unpatentable over Hata.

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CATHERINE SIMONE whose telephone number is (571)272-1501. The examiner can normally be reached on Monday-Friday 9:30-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CAS/  
Catherine A. Simone  
Examiner, Art Unit 1794  
August 25, 2009

/KEITH D. HENDRICKS/  
Supervisory Patent Examiner, Art Unit 1794

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